

**Notice of Allowability**

Application No.

10/696,741

Examiner

Gertrude Arthur-Jeanglaude

Applicant(s)

CORCIONE ET AL.

Art Unit

3661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the application filed 10/29/03.
2. ☒ The allowed claim(s) is/are 11-43.
3. ☒ The drawings filed on 12 January 2004 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All b) ☐ Some\* c) ☐ None of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date 112403
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

*Gertrude A. Jeanglaude*  
GERTRUDE A. JEANGLAUDE  
PRIMARY EXAMINER

### **REASONS FOR ALLOWANCE**

The following is an examiner's statement of reasons for allowance: The prior art fails to disclose an electronic torque control and distribution system for a hybrid propulsion vehicle wherein a drive thrust the vehicle is distributed between an electric engine and an internal combustion engine through transmission system delivering torque of both engines to wheels of the vehicle, the system comprising: a controller connected to a control unit and comprising a fuzzy logic processor for predicting through soft computing techniques torque contributions of the electric engine and of the internal combustion engine; and a sensor connected to the control unit for estimating polluting emissions from the vehicle. These limitations in combination are neither taught nor obvious by the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hayafune (US 5,428,531) discloses a speed change control method for setting a gearshift position of an automatic transmission for vehicles based upon driver acceleration intention and external variables.

Aoyama et al. (US 6,026,921) disclose a hybrid vehicle employing parallel hybrid system, using both internal combustion engine and electric motor for propulsion.

Nakae et al. (US 5,826,671) disclose an apparatus for controlling hybrid vehicle and method of the same wherein the object is thus to provide a vehicle control apparatus that can realize the effective reduction of emission.

Buglione et al. (US 5,845,731) disclose a hybrid motor vehicle that includes a final drive unit for providing tractive power to wheels of a motor vehicle, a first motor generator operatively connected in series to a heat engine of the motor vehicle.

Yamaguchi et al. (US 5,865,263) disclose a hybrid vehicle that has an engine and a generator motor connected through a planetary gear unit to an output shaft and the output of the engine is distributed between the generator and the output shaft.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gertrude Arthur-Jeanglaude whose telephone number is (703) 308-7564. The examiner can normally be reached on Monday-Friday from 8:30 a.m. to 6:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on (703) 305-8233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3661

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

GAJ

*GAJ*

September 1, 2004

*Gertrude A. Jeanglaude*  
GERTRUDE A. JEANGLAUDE  
PRIMARY EXAMINER